

Shannon Road-Rillito Creek

Boundaries:

The site extends approximately one-quarter mile to the north and south of Rillito Creek, and is bounded approximately by Meadowbrook Park to the east and Peglar Wash Park to the west.

Site History:

- In 1993, volatile organic compounds (VOCs) were detected below regulatory standards in the city of Tucson Z-006A water supply well, and this well was taken out of the Tucson Water distribution system. This well is currently used as a monitoring well. In 1994, VOCs were also detected below regulatory standards in the Metropolitan Domestic Water Improvement District (Metro Water) South Shannon well and in the Acacia Gardens Mobile Home Park water supply well. Metro Water redesignated the South Shannon well as a backup well, and the water drawn from it was blended with the water from two other wells prior to distribution. In June 1997, Metro Water completed the installation of a wellhead treatment system for the South Shannon Well.
- In 1995, Acacia Gardens Mobile Home Park was connected to Tucson Water. In 1997, the owners of Acacia Gardens installed a wellhead treatment system for their well and operated their system until December 2000. The Acacia Gardens well was abandoned in 2001. The mobile home park is currently being supplied water from the city of Tucson.
- In April 1999, the site was placed on the WQARF Registry with an eligibility and evaluation score of 53 out of a possible 120.
- A study to determine the vertical extent of the groundwater contamination within the contaminated wells has been conducted. The data gathered was used to develop future monitor well designs. An extensive passive soil gas survey was conducted south of the Rillito Creek to screen for potential sources of the groundwater contamination. The survey did not indicate that a significant source for the groundwater contamination exists within the current site boundary. The nearby El Camino Del Cerro WQARF site may be the source of groundwater contamination in the area.

Site Status:

- Seven new monitor wells were recently installed at the site, and a few more are planned to be installed as property access becomes available. The new wells have been designed to better define the extent of contamination and determine the site's relationship to the groundwater contamination at the El Camino del Cerro WQARF site. The data gathered will be used to complete ADEQ's remedial investigation of the site.
- Three of the new monitor wells will also serve as "sentinel" wells for monitoring possible contaminant migration toward Metro Water District wells.

- The treatment system at Metro Water's South Shannon well continues to operate and remove VOCs from the groundwater.

Site Hydrogeology:

- The site is located within the Tucson Basin. The Tucson Basin is a broad, northwest sloping alluvial valley surrounded by mountain ranges and can be divided in four geologic units: the Pantano Formation, Tinaja Beds, Fort Lowell Formation, and recent surficial deposits. The lower portion of the Ft. Lowell Formation and the upper Tinaja Beds comprise the regional aquifer at the site.
- The Tucson Basin is drained to the northwest by the Santa Cruz River and Rillito Creek, one of the major Santa Cruz River tributaries. Rillito Creek is an ephemeral stream with natural flow resulting from seasonal storm events. Runoff in Rillito Creek is usually longterm, low intensity flow resulting from mountain snow melt.
- Groundwater occurs at approximately 130 to 135 feet below ground surface in the area.

Contaminants:

The current contaminant of concern in groundwater known to be present above the regulatory levels is tetrachloroethene (PCE). Contaminants of concern at the site may change as new data become available.

In addition to PCE, there are five other contaminants which have been detected in groundwater at the site below regulatory levels. The contaminants include: 1,1-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, dichlorodifluoromethane (Freon 12) and trichloroethene.

Public Health Impact:

There are risks associated with exposure to VOCs, principally through drinking the contaminated water. A water treatment system is being utilized by Metro Water to ensure that drinking water meets the drinking water standards. Since no one is known to be drinking contaminated water, no one is known to be at risk of exposure to the contaminants. A risk assessment may be completed prior to selection of a remedy for the site.

Community Involvement Activities:

A community advisory board (CAB) was formed in October 2000 for this site in conjunction with the El Camino Del Cerro WQARF site CAB. These meetings are open to the public. The CAB meeting agendas and minutes can be viewed at <http://www.adeq.az.us/environ/waste/sps/reg.html>. A fact sheet containing information about the site was mailed to the community in December 2002.

Information Repositories:

Interested parties can review site information at the information repository at the Nanini Library located at 7300 North Shannon Road in Tucson, (520) 791-4626. Site information is also available at both ADEQ's Southern Regional Office located at 400 W. Congress, Suite 433 in Tucson, and the main office located at 1110 West Washington Street, Phoenix. Files are available for review Monday through Friday from 8 a.m. to 5 p.m. Please call (520) 770-3361 to arrange a file review appointment at the Southern Regional Office or the ADEQ Records Center (602) 771-4378 or (800) 234-5677 (Arizona toll-free).

Contacts:

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*In Arizona, but outside the Tucson area, call toll-free at (888) 271-9302.